Lepidopterological notes from Freshwater.

By RUSSELL E. JAMES.

Since Mr. Hodges discontinued his interesting notes on the Isle of Wight, one has heard little of Freshwater, and some notes on a three weeks' visit may be of interest. With his usual generosity, Mr. Hodges posted me well up beforehand, so that I started for Totland Bay on July 12th, with every prospect of a good time. The fine weather began simultaneously, and I just found the good local species coming out with a rush. Totland Bay is a little farther than Freshwater from the best grounds, but is far pleasanter to stay at, especially when one has small children, who reckon on a sandy beach. Immediately upon arrival, I quite unexpectedly met Mr. W. J. Kaye, who was bent on taking a quiet holiday before starting on an entomological trip to Trinidad.

The display of a fine lot of *Acidalia humiliata* and *Setina irrorella*, however, which I took before breakfast on my first morning, roused his enthusiasm for British field work again, and the holiday henceforward proved less "quiet" than he had anticipated. *A. humiliata* daily increased in numbers in its special locality until July 20th, when it began to get worn, and by the end of the month was over. My last visit on August 2nd only showed two very worn females. It is excessively local, but I should imagine it has gained ground since Mr. Hodges first discovered it. Moreover, as only a few yards of its special spot are workable, it should be quite safe from over-collecting. As a matter of fact Mr. Kaye thought none of it looked workable, and declined to accompany me. He took a few, however, by the much more laborious means of working in a boat from below.

The other great Freshwater insect, *Agrotis lunigera*, also at least maintains its numbers. This species was only just starting, too, and the first night (July 13th) produced eleven specimens. The following night 44 turned up, and then I did not treacle the Downs again until the 20th. On this night, had I cared, I could easily have taken 500, or even more. I had 70 bunches of treacled hemlock, and every one had three or four on, several running into double figures, and when I left, with every box full, at 11.30 p.m., they were still coming on thick. All these flowers were placed within six feet of the cliff edge, and a fence running back inland, which I treacled the same night, did not produce a single specimen, although other species were common enough. In the matter of flowers, I found white ones were much more remunerative than other colours. On the last night, nearly running short of my supply of hemlock, I used yarrow, ragwort, and hemp-agrimony as well. The yarrow proved almost as attractive as the hemlock, but on the ragwort and agrimony, there was scarcely a quarter as many moths as on the others. This was the more remarkable, as, being an excessively cold and windy night, the thicker ragwort and agrimony foliage offered much more shelter to the feeding moths than either of the others. These cliff species stand a lot of "weather." On this last night (July 31st) the hemlock stems were snapped again and again, getting shorter and shorter as they were cut and stuck up afresh; and the temperature was so low, that at 11.30 p.m. I could scarcely box the moths for cold hands. Yet I selected 60 fine *A. lunigera*, and left many others, whilst *Xylophasia*

polyodon and *Caradrina taraxaci*, with a smattering of other things, were in numbers, and still coming when I left.

Strange species visit the Downs on a good night. *Noctua festiva* was always common, and *Habrosyne derasa* fairly so; but more remarkable were *Hylophila prasinana* and *Boarmia repandata*. Strangest of all was a worn female of *Acosmetia caliginosa*, on July 20th. This puzzled me considerably, and for some time I had vague ideas of an addition to the British list. I was only familiar with the male, but a visit to South Kensington soon settled my doubts. *Agrotis lucernea* was unaccountably absent, one fine specimen on the 14th being the only representative, and *A. cinerea* (a nice whitish form) was remarkably late; three very decent males turned up on July 20th, and odd ones on the 13th, 14th, and 21th, the last in quite good condition.

During the first few days the moth of the moment, however, was *Agrotis corticea*. It already wanted picking over for condition, but was in countless numbers and great variety. Contrary to one's expectations for a chalky district, dark forms were more numerous than pale ones, and some very striking varieties were taken. On July 20th, a specimen was found eagerly feeding on treacle, although only just emerged, with wings quite undeveloped. I boxed it and left it quietly on the ground, and in half-an-hour it was fully expanded.

These are the more interesting moths taken at treacle on the Downs, but among many others, the following occurred: *Hadena dentina* (a nice pale form, commonly), *Noctua rubi* (very ochreous), *Xylophasia sublustris* (three, July 31st), *Mamestra anceps* (on the earlier nights), nice white forms of *Miana bicoloria*, and occasional *Neuria reticulata*. *Caradrina ambigua* never occurred, but all the four common species of the genus were in evidence, especially *C. taraxaci*.

Treacle in a wood bordering the marsh near Freshwater was only tried once (July 27th), and attracted *Craniophora ligustri*, *Thyatira batis*, *Habrosyne derasa*, *Triphaena fimbria*, *Agrotis corticea* (one), *A. nigricans*, *Apamea gemina*, *Xylophasia sublustris* (about a dozen), *X. hepatica*, *Lithosia lurideola*, *Leucania straminea*, *L. conigera* (in plenty), numbers of *Caradrina taraxaci* (more on ragwort than on trees), *Rivula sericealis* and *Rhodophaea suarella*.

The neighbouring marsh was worked at dusk more frequently. *Acidalia emutaria* was almost over, five specimens on July 16th being all I took, and although these were in fair condition, I saw none afterwards. Mr. Kaye, however, took a couple the following night. Odd *Toxocampa pastinum* were taken on the 16th by Mr. Kaye, but I did not find their headquarters until the 21st, when I netted 25, and Mr. Kaye another dozen, in a grassy field where the foodplant grew freely. This ground was all cut the next day, and, with the exception of an occasional specimen in the marsh, *T. pastinum* was practically finished. As the species rarely comes to treacle, it is worth mentioning that Mr. Kaye took a couple on some small posts that he had treacled, the night after the grass was cut. *Leucania straminea* occurred at dusk in the reed beds in fair numbers. Many were "bald," and they were, moreover, difficult to distinguish on the wing from the much commoner *L. impura*, but, in the end, about a dozen good ones were taken. *Nonagria geminipuncta* pupæ occurred in the same place, especially where the reeds were growing close into the wood. The larvæ apparently always entered fresh stems for pupation.

Although I found a good number of larvæ in the upper workings, I never found a pupa. All the pupæ were found in large stems close to the ground, and, in the end, I found the best way to work was to ignore the yellow leaves, and simply examine, on hands and knees, every well-grown stem. The holes where the larvæ entered were easily found, and just above them the brown discs, where they had almost gnawed through before pupating, leaving only the merest film for the moth to penetrate when emerging. Still more interesting is the curved hood the larva forms with reed gnawings and silk immediately above the opening, so that the escaping moth is automatically impelled in the right direction. Wellgrown reeds were none too common, and, in consequence, nearly always contained one or two pupæ, frequently three, twice five, and once six. In some of these crowded stems, the top tenant below a "knot" had scarcely an inch in which to pupate. The "hood" above referred to effectually protected the pupa below from any overhead disturbance.

Crambus selasellus, which I had not seen since I took a series at Chippenham Fen eight years ago, was common in the marsh nearer towards Yarmouth, and *Rivula sericealis* and *Ebulea crocealis* were not rare on the edge of the wood. Plenty of *Enodia hyperanthus* among the reeds again recalled Chippenham.

Several *Gillmeria ochrodactyla* and a number of *Chortodes arcuosa* occurred whilst working for *Toxocampa pastinum*, and, amongst a crowd of common woodland species and *Chilo phragmitellus* that flew over the reeds at dusk, odd *Cymatophora duplaris* and *Phorodesma pustulata* were netted; also one or two *Lithosia griseola*.

Returning to the downs, by day *Phycis subornatella* swarmed, and amongst them *Hypochalcia ahenella* and *Homaeosoma binaevella*, while, later in the month, *Botys flavalis* got up from the short turf at every step. On the cliff slopes, where workable, *Ennychia cingulata*, *Herbula cespitalis*, and *Pyrausta ostrinalis* were plentiful, *Stenia punctalis* rather scarcer, and occasional *Acidalia marginepunctata*, and very pale *Gnophos obscuraria*. Towards the end *Ægeria ichneumoniformis* occurred, the first of which I found in my net by chance. After this I only had two suitable mornings for working it, and took four more and missed another. I failed to find it by sweeping, and those taken I got by sitting still and watching patches of bird's-foot trefoil. The clearwing flight is soon distinguished amongst the host of flies. *Polyommatus corydon* flies on these slopes, *Satyrus semele* on the downs above, and a few *Mesotype virgata* occurred among the gorse bushes.

Setina irrorella swarmed at first, and justified its name of "Dew Moth" by flying freely and fairly strongly at 6.30 a.m. It was moderately active during the day, and again flew freely at early dusk. I never saw a female fly, and the males never strayed many feet from the cliff edge. They were most abundant on the slopes and wherever the ground was broken and the grass longer. I failed to detect any variation, except in expanse, but in this they varied greatly, some males being of immense size. They lingered on till the end, and I saw several specimens on my last morning (August 2nd).

In a hollow on Afton Down, where the white horehound grew, *Wheeleria migadactyla* (*spilodactyla*) was in great abundance on July 21st. On the first patch I came to I boxed three dozen without moving a foot, and then contented myself with taking pupæ. They

were in immense numbers on every plant, but so wonderfully in harmony with the leaves that, although in full view on the top surface, it was some moments before I found the first. When once seen, however, there were more than enough for my wants on one small patch, and larvæ also were still feeding—some quite small. As some of my pupæ gave imagines as late as August 14th, these small larvæ would probably keep the insect going into September. *Cledeobia angustalis* also occurred here, and one or two worn *Homoeosoma binaevella*.

The only other form of collecting was dusking in the lanes at Totland, especially up the Alum Bay Road. Here the hedge-bedstraw abounded, and for the first few days *Anticlea rubidata* was plentiful, but Mr. Kaye had found it still commoner before my arrival. It speedily became worn, however, and was gone after the first week. We both found it very sluggish and hard to beat out by day, whilst *Melanippe rivata* flew out at the least touch. This latter species was very abundant and lasted longer than *A. rubidata*, and a number of other Geometrids also occurred, *Acidalia imitaria* and *Melanippe galiata* perhaps being the best. Showing the lateness of the season, a very fair *Arctia villica* was seen on July 23rd, and *Euchelia jacobaeae* was flying in good condition at the end of the month. Odd *Hecatera serena*, *Nola cucullatella*, and *Eupithecia isogrammata* occurred on fences, and *Emmelesia unifasciata*, *Cleora lichenaria*, and *Cilix glaucata* came in the house to light. The only other oddments of interest were a few *Triphaena interjecta* flying at early dusk, *Cidaria pyraliata* and *Aphomia sociella* on ragwort blossom, and *Pseudoterpna pruinata* on Colwell Common. A nearly pure white *Scoparia* occurred on the cliffs, probably a form of *S. dubitalis*, and on some small willows *Dicranura vinula* and *Notodonta ziczac* larvæ and one *Leucoma salicis* pupa were found.

Although the season was late in the island, it was still later in the New Forest. My first visit was on July 17th, when I went across by early boat, had an hour or so at Holmsley, and then on to Ringwood. At Holmsley, under ideal conditions, I saw two male *Dryas paphia* and half-a-dozen *Limenitis sibylla* just out, when, normally, they should be almost going over. The same day, at Ringwood, *Eulepia cribrum* was still hanging on, about a month late, and several quite good ones were picked out. *Anarta myrtilli* was abundant over the heather, and *Nemeophila russula*, *Lithosia mesomella*, *Acidalia straminata*, and *Pseudoterpna pruinata*, occurred sparingly. *Heliothis dipsacea* had the usual very dark upper wings one finds in this peaty district, so different from those of the Tuddenham specimens. Treacle, the same evening, at Brockenhurst, produced a few things, of which *Leucania turca*, *Moma orion*, and *Eurymene dolabraria* were the best; several *Thyatira batis* and *Melanthia albicillata* were netted at dusk, and a larva of *Asphalia ridens* was found on an oak-trunk.

Next morning, before going back to Totland, I went to the *Anthrocera meliloti* ground, and found them quite common, but hard to find. They sit on the undersides of leaves and grass blades, and I found the best way to search, was to sit down and look carefully round sideways for a few yards, when they could easily be seen at rest. In spite of a bright sun, I only saw one fly, and then for only about a yard. This sluggishness is a safeguard, but, in spite of it, the species

could scarcely hold its own, were not its headquarters in private ground. The workable spot is happily only an overflow. I found one professional on the ground, and was informed by a labourer that he had "lived" there for a week, and had taken some 600 specimens! *Bupalus piniaria* was still about, and a collector I met showed me *Cidaria picata*, which, I believe, is new to the New Forest district.

At Holmsley again, on the 24th, the big butterflies were still very backward. *Limenitis sibylla* was getting commoner, but *Dryas paphia* was scarce, the only female taken or seen being a fine var. *valezina*. *Argynnis adippe* and *A. aglaia* both occurred singly, and a nice *Cleora glabraria* was found on an oak-trunk. On August 5th, *D. paphia* females were still exceedingly rare, and *L. sibylla* and *D. paphia* males still in good condition. On this day, I saw the first fresh *Gonepteryx rhamni* and the first *Eugonia polychloros*, although one or two hybernated specimens of the former were about as late as July 18th.

I had been staying at Brockenhurst on my way home since August 2nd, but did not do much systematic collecting, as I was with motoring friends. Two nights' treacling was a failure, except for two *Hypenodes albistrigalis* (which I wanted badly), and I was told that the "crimsons" were not out. A few dark *Gnophos obscuraria*, *Selidosema plumaria*, and *Crambus pinellus*, were netted at Setley Plain on the 4th, and *Heliothis dipsacea* was seen, but missed, the same day. At Burley, an odd *Psilura monacha* was seen on an oak trunk, and *Hydrocampa nymphaeata* and *H. stagnata* were abundant among *Sparganium* at Holmsley. A motor ride to Swanage on August 5th, gave me two hours's grace, and, contenting myself with sandwiches while the others lunched at a hotel, I ran up to see how *Thymelicus acteon* was holding out, and, to my delight, found it was in marvellous numbers—much commoner than when I first saw it nine years ago. I netted a few picked specimens, and, on my way along the cliffs, walked up *Botys verticalis* commonly in a clover field, where *Melanargia galatea* also abounded in perfectly fresh condition. The best capture, however, was one fine *Polyommatus corydon* ab. *fowleri*.

A number of *Orneodes hexadactyla*, *Pyralis glaucinalis*, and other oddments at light, complete my meagre New Forest list, but as during the three weeks—with Macros, Plumes, Pyrales, and Crambi only—I had seen or taken 215 species, I cannot complain of lack of variety. For this result, however, I have very largely to thank Mr. Hodges, as without his elaborate directions I should possibly have missed several desirable species, or at any rate should have wasted much valuable time in finding them.

Reports of Entomological Societies and Entomological Records.

By Rev. C. R. N. BURROWS.

I am engaged in compiling an "Index Entomologicus" for my own use—condensing into one ponderous volume records from the various entomological works which come within my reach—localities, dates of capture, aberrations, etc., etc. Should I live long enough, the work might become of value, could it find a publisher, but the clerical labour is tedious, monotonous, and *sad*. It is this *sadness* which prompts me to write these lines. I find in floundering through the ancient pages (for I have scarcely got within twenty years of the